1. Process for Conducting Needs Assessment

The development of a Five-Year Needs Assessment of the Maternal and Child Health population involved the full participation of Title V staff that work at all levels of the pyramid towards serving the population of women and children in American Samoa. Staff members meet on a regular basis throughout the year in order to discuss relevant data findings from each of the three main population groups. Through this interactive process between Title V leadership and staff, Title V programming is monitored and evaluated for effectiveness. In 2005, the needs assessment process culminated in the identification of various health status indicators in order to broaden the discussion of the overall health status of each of the three distinct population groups targeted by Title V.

Methodology

Beginning with the initiation of the new performance-based Title V guidelines introduced by MCHB in 1998, the Title V staff in American Samoa has been organized into 3 distinct work groups: pregnant mothers and infants, children and adolescents and children with special health care needs. Each of these three work groups provides the input for the development of the Annual Report, Annual Plan, and the Needs Assessment. Work group members collaborate in the discussion and analysis of data, present compelling information related to their respective areas of expertise, present specific knowledge gained from their respective roles in the delivery of services to the MCH population and interface with members of each of the other two working groups in an effort to prioritize health status problems and gaps in service delivery.

Key steps in "cycling" from the development of the Title V Needs Assessment through the identification of priority needs, establishing Territorial performance measures, setting annual targets for national and Territorial performance measures and developing annual plans to meet targets are outlined below:

-In order to begin the Title V Needs Assessment process, the Title V leadership staff met in order to arrive at a comprehensive list of all health status indicators and, later, health service indicators relevant to the MCH population in American Samoa. This comprehensive list of data elements took into consideration each of the 4 levels of the pyramid.
-Each data element was, then, assessed according to the following criteria:
*Availability of data
*Usefulness of data
*Integrity of data
*Data collection method
*Data analysis method

-Many data collection problems were identified. Health status and health service delivery data is still collected in a haphazard fashion in American Samoa.

Through the efforts of SSDI, a unified system of data collection is being developed. However, despite efforts by Title V through the SSDI Program, many obstacles still exist. Reliable health indicator data requires a cooperative effort between Title V and other Departments and agencies. Title V does not have direct control over staff at the hospital level where much of the MCH related data is generated. Therefore, much of the efforts put forth by the Title V Administration include interfacing and coordinating with the hospital administration towards improvements in data collection and data entry issues.

Qualitative Research – American Samoa Modified PRAMS survey

The Title V leadership and staff added a qualitative research component to the needs assessment process for the 2005 Needs Assessment. PRAMS, the Pregnancy Risk Assessment Monitoring System, is a surveillance project of the Centers for Disease Control and Prevention (CDC) and state health departments. PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. Title V leadership staff used the PRAMS survey which is administered in Hawaii as a basic framework from which to modify in order to meet the unique cultural and social circumstances in American Samoa.

Methodology

Title V leadership in American Samoa has decided to conduct qualitative research as a part of the 5-year Needs Assessment. Towards that end, the PRAMS survey was identified as a useful survey instrument which could be modified in order to conduct a small sample survey during a one month period of time.

The MCH Coordinator and the MCH Consultant obtained and thoroughly reviewed the PRAMS questionnaire which is administered in the state of Hawaii. Each question was discussed and either included in the American Samoa modified survey instrument or modified to suit the cultural setting in American Samoa. In some cases, questions were omitted entirely.

During a four week period of time, MCH Health Educators visited women in the maternity ward. Women who had very recently given birth were administered a questionnaire which contained 30 questions concerning their attitudes and observations of the time period before, during, and shortly after pregnancy. In the maternity ward, a total number of 118 women were surveyed. A smaller sample was surveyed at the site of Well Baby Clinics. A total of 59 women were surveyed by Title V Health educators.

Analysis of Data

A review of the data from these surveys showed that some factors need to be explored and focused on by Title V. This small survey indicates the need for further research in order for state health officials to use to improve the health of mothers and infants.

1. Prenatal Care

The trimester of access to prenatal care is a well-documented factor in the success of a pregnancy. Early access to prenatal care is strongly correlated with healthy mothers and health birth outcomes. Women access prenatal care late (after the first trimester) for a variety of reasons. Some reasons are cultural reasons as has been suspected in American Samoa. Other reasons are logistical, where access to care is difficult or work and other domestic duties impede women's ability to access care. The first step is accessing prenatal care for all women is, first, to know that one is, indeed, pregnant. Women who were surveyed at well baby care clinic indicated that 98% knew that they were pregnant in the first trimester yet only 69% of these women accessed prenatal care within the first trimester. 40% of women who were surveyed at the maternity ward immediately after giving birth indicated that they knew that they were pregnant during the first trimester. 39% indicated that they became aware of the pregnancy during the second trimester. Of the women surveyed in the maternity ward, 31% accessed prenatal care during the first trimester while 52% accessed prenatal care in the second trimester. Some of the reasons cited for late access to prenatal care were: lack of childcare (24%), lack of transportation (11%), unaware of the pregnancy (17%).

Vitamin supplements are a routine component of recommended prenatal care. For women who are nutritionally compromised in any way, the addition of a multivitamin is one way to mitigate the impact of a compromised nutritional status on the infant as well as the mother, herself.

Of a total sample size of 118 women in the maternity ward, 84% indicated that they did not take a vitamin supplement at all. At the well baby care clinic, 19 women or 32% of 59 women surveyed indicated that they did not use a multivitamin at all during their pregnancy. While it is recognized that small numbers make data difficult to compare, there appears to be a notable difference in this data item, possibly due to a recall bias among women in Well Baby Clinics over-reporting vitamin use.

Conclusion: Title V recognizes the importance of prenatal care to a positive birth outcome. While the use of prenatal vitamins is only one part of overall prenatal care for a women, the lack of follow-through by women to follow the doctor's recommendations indicates the need for future efforts by Title V. Further research would need to be done in order to in order to explore why women do not follow recommended prenatal protocols.

Access of timely prenatal care is an issue which must be addressed by Title V. Further qualitative research in the form of focus groups are required in order to determine why women do not access early and continuous prenatal care.

2. Intendedness of Pregnancy

Control over the timing of a pregnancy is an important factor in the health of a woman and infant. Title V recognizes that the woman's feelings about the pregnancy itself is a reflection on emotional wellbeing and can have a serious impact on the way in which the woman cares for herself and unborn child.

One question posed to women reads as follows: Thinking back to when you got pregnant, how did you feel about becoming pregnant? The modified PRAMS survey showed that in the maternity ward, 45% of respondents indicated that they would have wanted to be pregnant later. 19% indicated that they did not want to be pregnant then or at any time in the future. This represents a total of 54% of respondents indicating that the pregnancy was not well timed and/or within their control.

The following PRAMS question is also related to intendedness: When you got pregnant with your new baby, were you trying to become pregnant? At the maternity ward, 70% of the 118 women responded NO. In Well Baby Care, 76% of the 59 women responded NO.

The use of birth control is also a huge factor related to the intendedness of a pregnancy. In the maternity ward, 75% of those surveyed indicated that they were not using any form of birth control prior to becoming pregnant. This is also similarly reflected in the results from the well baby care surveys where 72% indicated no use of birth control.

Another question which is integrally related to the intendedness of a pregnancy is as follows: What were you or your husband's or partner's reasons for not doing anything to keep from getting pregnant? The response from the maternity ward shows that 39% indicated that they did not mind becoming pregnant while 30% indicated that their partner did not want them to use anything. The response from the well baby care clinic shows that 62% did not mind becoming pregnant while 72% of women indicated that their husbands did not want them using birth control of any kind. (this question allowed for multiple responses.)

For women surveyed in well baby clinics, a series of questions were asked which pertain to the possibility of future pregnancies: Are you or your husband doing anything now to keep from getting pregnant? 94% or women surveyed responded that they are not doing anything to keep from getting pregnant. However, 79% of women state "I don't want to use birth control" as the main reason for this. A full 40% cite that their husband does not want to use birth control.

Title V staff continue to recognize that this preliminary data indicate that there are attitudes and belief systems present in American Samoa which prevent men and women from ascribing to "best practices" in the area of family planning, birth control and prenatal care. Further research needs to be done in these areas in order to further identify these impediments and arrive at some possible interventions aimed at improving this situation.

Data collection limitations: Data which is required in order to satisfy Title V reporting requirements: mother's age, month when first prenatal care began, the number of prenatal care visits, and the gestational age of the infant at birth, are all found on the standard birth certificate. American Samoa, however, does not use the standard birth certificate at this point in time. Some of the main activities of SSDI for 2005 are centered on the goal of adopting the US Standard Birth Certificate. Data collection methods required in order to satisfy this data requirement necessitate a manual collection of data from logbooks written by the nurses in the clinic. Further, the overall lack of an automated data collection system requires that data is collected from charts and other forms which are not "clean" sources of data. As a result, the integrity of the data is sometimes compromised. Discussions regarding the adoption of the U.S. standard Birth Certificate have taken place and the process of adopting the US Standard Birth Certificate is currently underway.

Currently, the prenatal form has been appropriately revised and the approval process is underway. This approval process will include vigorous participation by all staff clinicians. Due to turnover in staffing at LBJ Hospital OB/GYN, Title V will continue efforts to obtain the "buy in" of all clinical staff members. Recently hired OB's have been forthcoming in suggesting ways to improve data collection methods as well as the types of data to collect. Clinicians have also suggested obtaining assistance from WHO as well as suggestions from their professional experience in other pacific island jurisdictions.

Improvements in data collection instruments with the adoption of the US Birth Certificate will enable the MCH program to measure the Kotelchuk Index and will facilitate measurement of other critical MCH indicators. It will also allow a much better opportunity for the MCH program to assess perinatal health care for mothers and infants.

7 Priority Needs

The Title V leadership staff examined all data presented and arrived at a list of 7 priority needs. The revised priority needs were determined through a process which includes an analysis of the health indicator data indicating greatest areas of need as well as the ability of Title V to affect positive changes. Some priority needs remain unchanged from the last Needs Assessment cycle while others have been modified. The list of 7 priority needs is as follows:

-To increase the percent of women with a live birth who have received adequate prenatal care as determined by the Kotelchuk Index.
-To increase the percent of children among the children with special needs who are known to the CSN Program who receive an annual dental assessment.
-To increase the percent of 2, 3, and 4-year-old children who are seen in the MCH Well Child Clinic who access dental health services.
-To increase the percent of infants who attend the Well Baby Clinic who are exclusively breastfeeding at 4 months of age.
-To increase the percent of children with special needs who have received an annual reevaluation by an interdisciplinary team.
-To decrease the percent of adolescents in Grades 9-12 who report smoking cigarettes within the past 30 days.
- To improve nutritional status of children within the first year of life

Targets were then set after in-depth discussions amongst staff of the indicators for each measure and a clear estimation of possible progress that could potentially be made, taking into consideration, any obstacles to progress. Each group: women and infants, children and adolescents and CSHCN produced their own work plans for the coming year and submitted them to the Title V main office. Each plan also contained a budget. The MCH Coordinator was responsible for making all final budgetary decisions

2. Needs Assessment Partnership Building and Collaboration

The Departments and agencies which collaborated on the development of the Needs Assessment are outlined below:
Department of Education - provided data for data elements including YRBS data.
LBJ Tropical Medical Center
Dental Services Division - provided data and other information regarding the dental health needs and services of the MCH population.
Vital Statistics - assisted in providing data for needs assessment as well as outcome measures.
Department of Commerce - provided data and overall statistical information for the general overview of the Territory as well as some demographic data.

A committee comprised of a number of government department representatives including a representative of the Community College reviewed the Needs Assessment and their input was solicited.

The Needs Assessment, Annual report and Annual Plan was made available in the Public Health conference room for public review and comment.

Some information for the Needs Assessment was extrapolated from a study titled: Nutrition Assessments in Children Living in the Pacific Islands: A Capacity Biilding Approach. This study was conducted through a collaborative effort between the Center for Disaster and Humanitarian Assistance Medicine

(CDHAM), Uniformed Services University of the Health Sciences (USUHS); Office of Minority Health, Centers for Disease Control and Prevention (CDC); Department of Human Nutrition, Food and Animal Sciences, University of Hawaii (UH); and the American Samoan Public Health Department and Land Grant College.

Strengths and weaknesses

The small size of the Territory of American Samoa provides a unique opportunity for Title V staff to work together at a personal level within Title V programming as well as with other agencies on the island. In American Samoa, as compared to larger states, there is no large, cumbersome government bureaucracy. The small size of the Territory also allows staff to see health issues and concerns at the population level in a very personal way.

The most notable weakness of Title V in American Samoa continues to be in the area of data. It continues to be very difficult for Title V to obtain reliable data for the Needs Assessment and annual MCH Block grant submission. This results in an impaired ability to analyze issues and evaluate the effectiveness of programs. Through the efforts of SSDI, all data collection forms have been assessed and have been determined to be adequate. All forms underwent a thorough review process by the MCH Coordinator in collaboration with MCH staff, Public Health Nursing, the Division of Community Health and SSDI Systems Developer. Problems have been identified in uniformly filling out the forms. This QA issue can be easily addressed in the dispensaries where the staff members are employees of the Department of Health. However, in the maternity and nursery wards of LBJ Tropical Medical Center, this problem is more difficult to address as the employees are not Public Health staff members. As such, Title V does not have direct administrative access to these employees. As a result, this situation will continue to be monitored and will be addressed at the Administrative level.

Assessment of Needs of the Maternal and Child Health Population Groups

Overview of the Maternal and Child Health Population Status

The American Samoa Title V leadership staff is often exposed to those involved with Title V programs at the National level. Meetings (AMCHP, MCH Leadership Meeting etc.) provide an opportunity to learn about the National emphasis of Title V, goals, objectives, new initiatives etc. While it is recognized and appreciated that Title V represents programs of *national* emphases, it can be discouraging to leadership and staff alike to use US National data in order to provide comparisons of data sets. As a small island territory which is geographically isolated form the US and a very unique and strong cultural heritage, American Samoa is, in many ways, very different from the US mainland. As such, it is found to be more useful to Title V program leadership to compare health status indicators and core outcome measures against previous years' data (as opposed

to *Health People 2010*) whenever possible. For the purposes of this Needs Assessment, comparisons are, therefore, made against data from the Territory from previous years, and on the regional level with data from other Pacific Island jurisdictions.

The total population of the territory of American Samoa according to the 2000 Census was 57,291. American Samoa's population increased by 10,518 over the previous census in 1990, representing a 22% growth rate over the 10 year period. Most rapid growth was in Tualauta County which experienced a 50% growth in 10 years. Population estimates show that if this rate of growth remains consistent, the current mid-census population of 2005 would be 63,593.

According to 2000 Department of Commerce statistical information, American Samoa is ranked 3rd in the South Pacific Region in terms of population growth. With a total land area of approximately 77 square miles, the 2000 population density was 774 per square mile. The Territory experiences a 2.5 percent annual growth rate and a fertility rate of 4.5 per 1,000 women. In 2004, there were a total of 1,713 live births in American Samoa. Approximately 98% of these births took place at LBJ Tropical Medical Center, the Territory's only hospital.

Pregnant women, mothers and infants:

Title V leadership in American Samoa conducted a chart review of women who attended prenatal are at the Tafuna family health Center. A total of 531 records were thoroughly reviewed in order to determine prenatal care rates and examine other attributes common to this population.

Of the 531 women whose charts were reviewed, 12% accessed prenatal care in the first trimester while 68% accessed prenatal care in the second trimester. Fully 68% of the women received 5 or less total visits. Of the 531 women reviewed, 75% were married, 57% were unemployed and 86% claimed personal income below $4,000. Twenty percent of the women reviewed were labeled “high-risk.” Of the 20% high risk women, 15% were labeled high-risk due to parity of 5 or more. Another 5% were high risk due to other causes. Additionally, 33% had low hemoglobin.

A closer examination of prenatal care in 2003 by using the full Kotelchuk Index for Adequacy of Prenatal Care Services and taking into consideration the early initiation of prenatal care and the ratio of observed visits to expected visits, only 12% of pregnant women received adequate prenatal care and 88% did not receive adequate care. The 2004 infant mortality rate is 14.8/1000 live births. There has been an increasing trend over the past several years that is believed to be associated with a lack of adequate prenatal care.

Prenatal care rates have been consistently been low in the Territory of American Samoa. Inconsistencies in data collection methods make it difficult to compare data over time. However, it is clear that the rate of initiation to early prenatal care is *decreasing.* Qualitative research has been conducted in this area and the following barriers are cited: 1. Perception that prenatal care is unimportant 2. Lack of transportation, poor roads 3. Other childcare or work obligations 4. Traditional beliefs that any intervention of "modern medicine" is unwise and potentially threatening to the pregnancy. 5. Some women opt for care provided by a "traditional healer". Clearly this list of barriers hints at the accessibility and perceived acceptability of prenatal care in the population of women in American Samoa. These alarmingly low rates of initiation of early and continuous prenatal care emphasize the need for further qualitative research in order to determine the reasons for these low rates.

Modified PRAMS survey results showed that among women surveyed in the maternity ward, 31% accessed prenatal care in the first trimester as self reported. 52% reported accessing prenatal care in the second trimester and 17% reported accessing prenatal care in the third trimester. When asked if the respondent was able to access prenatal care as early as she wanted, 47% of women replied “no” while 53% replied “yes.” Some of the main reasons reported by women for not accessing care earlier were: did not have enough money to pay for visits, I didn’t know I was pregnant, I was told to come back another time, and I had no one to care for my other children.

A smaller sample survey taken at the well baby clinics showed noticeably different results. 69% of women reported accessing prenatal care in their first trimester and 30% reported accessing prenatal care in the second trimester. This data appears to indicate a significant problem of recall bias or some problem in the data collection method as American Samoa data for the last reporting year (2003) showed 25% of women access prenatal care in the first trimester.

The seriousness of this problem is underscored by a comparison of data relevant to the early initiation of prenatal care in the other Pacific Island jurisdictions. This problem of access to prenatal care within the first trimester appears to be very prevalent in the Pacific region. In 2003, the Federated States of Micronesia reported that 31% of infants are born to women receiving care in the first trimester. Other island jurisdictions show rates of early prenatal care as follows: Marshall Islands-27%, Palau-30% and Guam, perhaps the most "modernized" of the Pacific jurisdictions, 59%.

Another recent survey examined infant feeding practices in American Samoa (Nutrition Assessments in Children Living in the Pacific Islands Novotney et al, 2004) In this survey, 419 children were assessed and questionnaires were administered in 320 households. Questions concerning initiation of and duration of breastfeeding were asked of mothers of children. Data showed that 74.9% of women indicated breastfeeding for at least some duration of time while 25.1%

indicated never having breastfed their child. 50.8% indicated that their child was breastfed until 6 months of age and 19.1% of respondents indicated breastfeeding for 7-12 months while 30.1% indicated breastfeeding for a period longer than 12 months.

This same nutritional assessment survey yielded interesting information regarding age of initiation of liquids other than breast milk. 23.4% of respondents reported that other liquids were introduced at less than one month of age. 35.8% reported exclusively breastfeeding through 6 months of age.

This information is particularly interesting when compared to data relevant to the utilization of WIC services. 68.3% of women reported participation in the WIC program for baby formula. Another 9% reported participation in the WIC program for the “breastfeeding package.”

Current data from 2004, shows that only 23% of newly delivered women are documented as breastfeeding at hospital discharge, whereas the Territory-specific target is 81%. The number of women breastfeeding their infants significantly increases after hospital discharge and 34% are reported to be exclusively breastfeeding at 6 months of age.

It was hoped as well as assumed that the Supplemental Feeding Program for Women, Infants and Children (WIC) which was extended to include the Territory in 1996, would assist Public Health in the efforts to encourage women to breastfeed and subsequently, increase rates of breastfeeding. In American Samoa, however, the exact opposite has appeared to be true. It is believed that the following factors have contributed to low breastfeeding rates in the Territory: 1. The WIC "package" automatically gives formula to women in the program when their babies reach 6 months. (many families in the "village setting" share food and benefits, including formula.) 2. The WIC "package" consists of mainly foods that are not generally consumed in American Samoa (dried beans etc). No efforts have been made towards adapting the food package to include local, more appropriate foods.

Policy changes are essential to broadening the Department's capacity to influence increases in breastfeeding rates. The Department must work closely with WIC as well as with the Hospital administration in order to make both environments more "baby friendly." Policy changes will be required in order to implement changes in delivery room and nursery protocols. Currently, babies are not put to breast immediately after birth and are routinely brought to their mothers on the maternity ward with a bottle of formula in the bassinet.

A regional comparison of breastfeeding rates at hospital discharge is very interesting with a very wide range of data reported. According to 2003 data, both the Marshall Islands and Palau report a rate of 100% while the Federated States

of Micronesia (FSM) report 85.6% and the Northern Marianas report 72% of women breastfeeding at hospital discharge.

The average birth weight of Samoan babies is higher than in the US mainland. Birth weights for gestational period are higher. Therefore, there are very few very low birth weight babies where less than 1500 grams is used as the definition of very low birth weight. In 2004, data shows only 4 very low birth weight live births out of a total of 1713 live births for the year. This indicates .2 percent of the total live births were very low birth weight.

Children and Adolescents:

According to Healthy People 2010, dental caries in American Samoa is higher than in any South Pacific jurisdiction (WHO Global Oral Data Bank), and higher than the mean caries rate for US children (Kaste, et al. 1996). In 1995 the American Samoa Government, with the assistance of World Health Organization (WHO) conducted the first oral health survey of the territory. The mean number of decayed, missing, filled teeth (DMFT) for 12 year-old children was 6.5, and only 6% of decayed teeth had been filled. Additionally, in 1999, a Public Health Dental specialist hired by LBJ Hospital, conducted the first Territory-wide survey of preschool children and found that 87% of children had dental caries, much higher than the mean for other minority group with high rates of dental caries. It was therefore concluded that these numbers indicated that the mean DMF of both the primary and the permanent dentition of American Samoan children is much higher than for US children.

Data continues to be collected on the prevalence of dental caries in the Territory. Surveys of the Early Childhood Education (ECE) population have revealed that over 85% of children have serious dental disease. A total of 5,982 health screenings were conducted in schools and revealed that 5,085 or 85% showed evidence of dental caries. All children with dental caries are referred to either the ECE center for follow-up or the individual child's elementary school where the Dental Services provide a mobile dental clinic on an as-needed basis. Dental disease among children has been and continues to be a major public health problem among the childhood population in American Samoa.

Lack of sealants as a contributing indicator for poor dental health also appears to be a problem of regional proportions. In 2003, the following data was reported by other pacific island jurisdictions for percentage of children with sealants: Guam 49%, Northern Marianas 54.1%, FSM 54.7%, Marshalls 54.9%, and Palau at 81%. This shows a fairly wide range of data reported by the Pacific jurisdictions.

American Samoa data shows that 20% of third grade children who were assessed by the dental program had received at least one protective sealant.

Sealants continue to be provided for children in the first, third and eighth grade during FY 2004. A total of 267 children were seen in a cooperative effort between MCH and the dental outreach team. Of this total number, 254 children were provided fissure sealants. The Dental Outreach team targets efforts towards first, fourth and eighth grades. In 2004, the Dental Outreach Team screened, assessed, delivered heath education and administered fluoride treatments to these 267 children in 4 schools.

Data related to nutritional status was examined for the child population by reviewing the problem of iron deficiency anemia. In American Samoa, hemoglobin levels are routinely checked at 6 months of age. Those children with low hemoglobin are provided counseling and iron supplementation and followed up one month later for a re-assessment. Children with hemoglobin levels below 11 are given nutritional counseling and are re-assessed one month later. Current data from the Well Baby Clinics show that 54% of the infants tested had low hemoglobin. This increase in the percentage of children with high hemoglobin is largely due to significant increases in screening. In 2004, testing equipment was installed at the site of each dispensary for use by the staff. In previous years, dispensary staff were required to wait for the Nurse Practitioners to be present with the proper testing equipment.

An examination of alcohol and tobacco consumption through the 1999 Youth Risk Behavioral Survey (YRBS) showed that 32% of the students had at least one drink of alcohol on one or more of the last 30 days; whereas 56% of the students had at least one drink of alcohol on one or more days during their life. The 1997 survey showed that 54% of the students had ever had alcohol.

Interestingly, the State of Hawaii chose a state negotiated performance measure on alcohol consumption in the teen population as well, reporting that 25% of teenagers from 12-15 reported alcohol use within the past 30 days as reported on the YRBS.

Further, the 2005 Youth Tobacco Survey showed that 23% of the students (ages 10-15) reported having had tried smoking.

The 1999 Youth Risk Behavioral Survey showed that 40% of the students reported having had sexual intercourse; whereas in 1997, 37% reported sexual activity. In 1999, 31% of the male students reported using a condom during their last sexual intercourse.

Children with Special Health Care Needs

Title V provides assessments of those children who are screened positive for having a possible chronic or disabling condition. Those children with chronic and debilitating conditions and their families are given special support and services through the CSN Program. The overall goal of the CSN Program is to encourage

and empower children with special needs to live within their communities in an acceptable way and live to their fullest potential. Program data shows that 147 children are currently enrolled in the CSN data base.

Of the total population of 147 children known to the CSN Program, 98.6% have completed immunization for age. This represents a huge improvement over the 84% achievement reported last year. This increased success is largely attributed to increased partnering with CSN families and greater frequency of home visits.

Recent efforts towards mainstreaming placement in schools as well as the arrival of federally funded programs such as WIC and food stamps, the numbers of CSHCN children on the island has been illuminated through the eligibility process for these programs.

Program data also reveals that a low 48% of CSHCN are receiving all services outlined in their individual service plans. Further, of the 147 children in the CSN data base, 48% of the children currently have an annual re-evaluation completed by an interdisciplinary team.

Mortality trends in American Samoa, most notably, the Infant Mortality rate, have been increasing in recent years. The infant mortality rate using aggregated data over a 3-year period of time shows that the infant mortality rate has been increasing in recent years. The 2005 data reported in this Needs Assessment shows an increase in the infant mortality rate. In the previous reporting year, the infant mortality rate was reported at 12.7 per 1,000 live births while 2004 data shows 15 infant deaths per 1,000 live births.

Morbidity Trends

In the past, the diabetes control program has reported alarmingly high prevalence rates for diabetes in the Territory. The program initiated a diabetes registry in 1995 which had 4,380 registered diabetic cases representing a prevalence rate of **82.6 per 1,000** people. While the Year 2000 Objectives target a rate of 25 per 1,000 people, the prevalence rate of 82.6 per 1,000 represents a severe problem in this area. Further, reportedly one half of all dialysis patients treated at the hospital are diabetic. While it is commonly known that roughly half of all diabetics in the U.S. are unidentified, the reality for the pacific island Territory of American Samoa could be staggering.

More recent studies of the prevalence of obesity in the Territory of American Samoa have revealed an excessively high prevalence of obesity in the Samoan population (McGarvey, et.al.) Data from 2002 for males in American Samoa show that 50.7% were of normal weight, while 20.5% were overweight and 28.8% were determined to be obese. In females, 40.3% were found to be of normal weight, while 32.1% were overweight and 27.6% obese. This data shows alarmingly high rates of overweight and obesity. Additional data collected by the same researcher (Steven McGarvey et.al.) in 1976-1978 points to a disturbing

trend. In 1976-78, 80.3% of males were determined to be of normal weight while 17.9% were found to be overweight and only a very small percentage - 1.7% - was found to be obese. In females for the same time period, 68.5% were found to be of normal weight while 26.6% were overweight and only 4.9% were obese. Currently, for some age groups, percent of overweight is reported to be 80-90%. Obesity and it's related health problems continue to be a severe problem in the Territory. An obesity study of 2002 showed that in 1978 the average BMI for children ages 6-8 was 17.2 while 2002 data shows that the average BMI in 2002 for the same age group was 19.1.

Severe obesity is said to be the result of rapid modernization, most notably, changes in diet from the traditional "Samoan diet" to one of highly processed foods and canned meats very high in fat and sodium. This problem is further exacerbated by a lack of readily available fresh foods. Fresh fruits and vegetables are imported from the U.S and New Zealand via airfreight or ship. This adds to the cost of the produce making them prohibitively expensive to many people. The Pacific jurisdictions in general, and American Samoa specifically experience high rates of other so called "lifestyle" illnesses such as heart disease, hypertension and diabetes. Nutrition program data indicates that 54% of children under 5 are iron deficient.

Mortality trends in American Samoa have been increasing in recent years. The infant mortality rate using aggregated data over a 3-year period of time shows that the infant mortality rate has been increasing over time. The data reported in1999 showed a slight reversal in this trend (12.7) but analyses of this rate over time is being closely monitored by Title V. In 2004, however, the three year moving average infant mortality rate is 14.8 per 1,000 live births. This is an increase over the pervious reporting year of 13.3 per 1,000.

The neonatal infant mortality rate for 2004 is 12.9 using 3-year moving average data. The postneonatal mortality rate for 2004 using 3 year moving average data was 5 per 1,000. The perinatal mortality rate for 2004 using 3 year moving average data was 17.6. The child death rate for 2004 was 48.9 per 100,000.

All mortality data for the Territory shows increases. Title V will monitor and discuss this situation as solutions are explored for decreasing these important maternal and child health indicators.

Health Disparities

Tualauta County is a heavily, densely populated are on the main island of Tutuila. Two of the main villages within this county are Tafuna and Nuu'uli and they are located in the Western District of the island. Based on the 1990 U.S. census, the population of Tafuna in 1996 is estimated to be 6,424 and the population of Nuu'uli is estimated at 4,761.

The Western District of the island is the fastest growing. Historically, these villages have had a large percentage of freehold land. Most of the land available in the Territory is not available for purchase, rather can only be given or exchanged between persons of Samoan ancestry. Of the total land area of the Territory, only 14 percent of the land can be bought by persons of non-Samoan ancestry. A great proportion of this freehold land is located in the villages of Tafuna and Nuu'uli. As a result, these villages have been the fastest growing villages on the island in terms of population growth. Huge numbers of persons of Western Samoan and non-Samoan ancestry have purchased parcels of land and built homes in this area. The majority of these people tend to be of Western Samoan or Tongan descent. These settlements of Western Samoans and Tongans tend to be ***extremely*** overcrowded and standards of life tend to be ***below*** that of the overall quality of life enjoyed by the greater Samoan community. Homes are built very close together and many family members share the same small living quarters. Often times, buildings are not built according to safety codes and do not contain adequate plumbing and lavatory facilities. The combination of all of these life-circumstances result in a marginalized population at environmental risk of a myriad of negative health outcomes. The graph below illustrates the huge proportion of the population (31%) which has immigrated from neighboring Western Samoa, an independent developing island nation with a per capita income far below that of American Samoa.

Although no real data exists to substantiate this, it is commonly known that Tongans and Western Samoan represent marginalized populations who access the health care system at a disproportionate rate. Many tend not to practice preventive health care measures and tend to access the "crisis care" or emergency care system when health conditions become intolerable. Tongans and Western Samoans have a greater tendency to practice local medicine which certainly has it's place among respected health care practices. However, modern health care interventions and medical practices are essential during those times when traditional healing practices fail. These culturally isolated populations, however, have a tendency towards using traditional medicine as their sole means of health care and health maintenance.

The overall marginalization of this population is exacerbated by the economic reality for these ethnic groups. The cost of care to non-residents is extremely high in comparison to wages. Medical clinic visits are $10 per visit for non-residents and $5 for residents. The possibility of hospital admission would result in a $100 per night for a non-resident and $60. fee per night for a resident. This is extremely low when compared to U.S. standards, however, this population tends to suffer from unemployment and underemployment at a very high rate resulting in economic isolation from the existing health care system. Many of the Western Samoan and Tongan guest workers are employed by the tuna canaries at a rate of $2 - $3 per hour. Many others are not employed at all, relying on a subsistence level of living. Many of these people are unemployed, relying on a subsistence lifestyle or have a family member working at the canaries at very low hourly wages.

Geographic isolation is another factor resulting in the inaccessibility of the existing health care system to these populations. About two thirds of the island's land area is steeply sloping and virtually inaccessible. The more isolated areas of the island tend to be inhabited by these underserved "pockets" of the population. These parts of the island tend to be far from the main road and a great distance from public transportation. Many of the isolated rural areas have no roads at all, only bush paths which are extremely muddy during the rainy season.

4. Examine MCH Program Capacity by Pyramid Levels

Direct Health Care Services
Enabling Services

Primary and preventive health care services are universally accessible in American Samoa. Specialty care services are accessible sporadically on island and, in extreme cases, through the off-island referral program. Financial access to health care becomes a problem in areas of high immigrant populations.

The cultural acceptability of health care is another area of concern. Many of the indicators of access to preventive and primary care show a low utilization of existing services. (e.g. Prenatal care) The issue of cultural acceptability will be addressed in further qualitative research studies.

The determined priority Territorial concerns in the area of Direct Services and Enabling services are as follows:

-To increase the percent of women with a live birth who have received adequate prenatal care as determined by the Kotelchuk Index.

The American Samoa Government Code requires that all health services, primary and specialty care, are available to all residents free of charge. The health services provided free are financed by local American Samoa Government revenue and a capitated amount of Medicaid funds which are received by the Territory in a lump sum. These funds contribute to the overall provision of health care services in the Territory. Due to this unique situation, all potentially eligible Medicaid children receive a service paid by the Medicaid Program.

"Managed care" is a concept that does not apply to the situation in American Samoa as all healthcare services are provided through a Government-affiliated hospital and Health Department. Welfare reform does not apply to American Samoa as welfare is not distributed in the Territory. SSI also does not apply to American Samoa.

CHIP is available to American Samoa in a lump sum and is distributed to the Hospital. The CHIP committee (which includes the MCH Coordinator) makes decisions regarding distribution of these funds on the local level. A dental initiative will be the result of American Samoa CHIP funds.

All health care services are available on island or through agreements with off-island facilities as needed. Physical Therapy / Occupational Therapy is one notable exception to this.

Population-Based Services

The determined priority Territorial concerns in the area of Population-based services are as follows:

-To increase the percent of children among the children with special healthcare needs who are known to the CSN Program who receive an annual dental assessment.
-To increase the percent of children with special needs who have received an annual re-evaluation by an interdisciplinary team.
-To increase the percent of 4 month old infants who attend the Well Baby Clinic and at 4 months of age are exclusively breastfeeding
-To decrease the percent of adolescents in Grades 9-12 who report smoking cigarettes within the past 30 days.
- To improve nutritional status of children within the first year of life

Infrastructure Building Services

The determined priority Territorial concerns in the area of Infrastructure-Building services are as follows:

-To increase the percent of 2, 3, and 4 year old children who are seen in the MCH Well Child Clinic who access dental health services.

Health Status Indicators

Many of the Core National Health Status Indicators have very little or no relevance to American Samoa. For example, Medicaid and CHIP related measures are impossible to examine in the particular health care setting in American Samoa.

Title V staff found Health Status data on access to prenatal care to be highly relevant to the situation in American Samoa. Examination of prenatal care in the context of the Kotelchuk Index resulted in a further exploration of the use of this index. Use of this index was further chosen as a Territorial performance Measure.

All other areas of priority need and the development of performance measures took place as a result of discussions among the three individual work groups and the scoring method for determining priority needs.

5. Selection of State Priority Needs

Priority Health Problems

Each of the three work groups: Pregnant women and infants, Children and adolescents, and Children with special health care needs, met a number of times throughout the development of the 5-Year Needs Assessment. Each group met with the intention of discussing the overall health status of the populations with which they work, suggesting possible health status indicators appropriate for each group, providing data for the National Core Health Status Indicators. Each group met with the intention determining additional health status indicators, specific to American Samoa, which would expand the level of assessment beyond that of the National Core Indicators. The results of the work groups are presented below and are described as priority health problems.

Pregnant women, mothers and infants:

To increase the number of infants born to women receiving adequate prenatal care according to the Kotelchuk Index.

Title V leadership in American Samoa conducted a chart review of women who attended prenatal are at the Tafuna family health Center. A total of 531 records were thoroughly reviewed in order to determine prenatal care rates and examine other attributes common to this population.

Of the 531 women whose charts were reviewed, 12% accessed prenatal care in the first trimester while 68% accessed prenatal care in the second trimester. Fully 68% of the women received 5 or less total visits.

The 2004 IMR is 14.8/1000 live births and there is an increasing trend over the past several years that is believed to be associated with the lack of adequate prenatal care.

Prenatal care rates have been consistently been low in the Territory of American Samoa. Inconsistencies in data collection methods make it difficult to compare data over time. However, it is clear that the rate of initiation to early prenatal care is *decreasing.* Some qualitative research has been conducted in this area in past years and the following barriers are cited: 1. Lack of transportation, poor roads 2. Other childcare or work obligations 3. Perception that prenatal care is unimportant 4. Traditional beliefs that any intervention of "modern medicine" is unwise and potentially threatening to the pregnancy. 5. Some women opt for care provided by a "traditional healer". Clearly this list of barriers hints at the accessibility and perceived acceptability of prenatal care in the population of women in American Samoa.

The seriousness of this problem is underscored by a comparison of data relevant to the early initiation of prenatal care in the other Pacific Island jurisdictions. In 1996, the Federated States of Micronesia reported that 11% of infants are born to women receiving care in the first trimester. This is the closest comparison to the data derived from the Needs Assessment data obtained for American Samoa. Other island jurisdictions show higher rates of early prenatal care: Marshall Islands-25%, Palau-35% and Guam, perhaps the most "modernized" of the Pacific jurisdictions, 66%.

-**To increase the percent of 4-month-old infants who attend the Well Baby Clinic at 4 months of age who are exclusively breastfeeding.**
Current data shows that only 3.3% of the women are documented as breastfeeding at hospital discharge, whereas the target, in the past, has been set as high as 81%. The percentage of women exclusively breastfeeding at 6 months of age is 34%.

Although Title V continues to work closely with the hospital administrative staff towards the goal of making the hospital more baby-friendly, there still remains much progress to be made. Significant obstacles exist at the level of the hospital administration which seems to impede progress in this area. The hospital administration recently implemented a significant increase in the administrative fee it charges for admissions for non-residents. The unfortunate result is that mothers are highly motivated to be discharged from the maternity ward before the standard 24-hour period. However, as their babies are allowed to remain in the care of the hospital staff for a full 24 hours, this results in babies remaining in the nursery whose mothers have already been discharged.

Policy changes are essential to broadening the Department's capacity to influence increases in breastfeeding rates. The Department must work closely with WIC as well as with the Hospital administration in order to make both environments more "baby friendly." Policy changes will be required in order to implement changes in delivery room and nursery protocols. Currently, babies are not put to breast immediately after birth and are routinely brought to their mothers on the maternity ward with a bottle of formula in the bassinet.

Children and Adolescents:

To increase the percent of 2, 3 and 4 years old children who are seen in the MCH well child clinics who access dental health services:

Past surveys of the ECE population showed that over 85% of the children had serious dental disease. There have not been any recent surveys conducted; however, the consensus of the MCH staff is that dental disease among children continues to be a major public health problem.

Lack of sealants as a surrogate indicator for poor dental health shows a wide range of data reported by the Pacific jurisdictions. The FSM reports 54.7% of third graders had received sealants while Palau reports a very high percentage at 81%.

The work group for children and adolescents chose the overall rate of DMF to be of a high concern in this population and has isolated it as a *priority health problem.*

To decrease the percent of adolescents in grades 9-12 who report smoking cigarettes within the past 30 days.

The 1999 Youth Risk Behavioral Survey showed that 73% of the students reported having had tried smoking and 41% of the students reported smoking cigarettes on one or more the past 30 days.

The work group for children and adolescents found this information compelling enough to isolate this as a *priority health need* for this population.

To improve nutritional status of children within the first year of life

Data related to nutritional status was examined for the child population by reviewing the problem of iron deficiency anemia. In American Samoa, hemoglobin levels are routinely checked at 6 months of age. Those children with low hemoglobin are provided counseling and iron supplementation and followed up one month later for a re-assessment. Children with hemoglobin levels below 11 are given nutritional counseling and are re-assessed one month later. Current data from the Well Baby Clinics show that 54% of the infants tested had low hemoglobin.

Title V staff assessed this priority need and the ability of Title V to positively impact this need. The work group for children has, therefore chosen this as a priority health need in 2005.

Children with Special Health Care Needs

To increase the percent of children with special needs who have an annual re-evaluation by an interdisciplinary team.

Of the 147 children in the CSN data base, 48% of the children currently have an annual re-evaluation completed by an interdisciplinary team.

The work group for CSHCN determined that this should be viewed as a main priority health problem for this population.

To increase the percent of children among children with special health care needs who are known to the CSN Program who receive an annual dental assessment.

Historically, CSN access the dental care services in extremely low numbers. During a given year, the MCH Dental staff may see on or two children from this population. It has therefore become a priority of Title V to assure access to dental health services to this marginalized segment of the population by adopting this issue as a priority need. The work group for CSHCN determined that this should be viewed as a main priority health problem for this population.

American Samoa 7 Priority Needs

-To increase the percent of women with a live birth who have received adequate prenatal care as determined by the Kotelchuk Index.

-To increase the percent of children among the children with special needs who are known to the CSN Program who receive an annual dental assessment.

-To increase the percent of 2, 3, and 4-year-old children who are seen in the MCH Well Child Clinic who access dental health services.

-To increase the percent of 4-month-old infants who attend the Well Baby Clinic at 4 months of age who are exclusively breastfeeding.

-To increase the percent of children with special needs who have received an annual reevaluation by an interdisciplinary team.

-To decrease the percent of adolescents in Grades 9-12 who report smoking cigarettes within the past 30 days.

- To improve nutritional status of children within the first year of life

Needs Assessment Summary
The priority needs for American Samoa have been identified using a participarory approach involving Title V staff with final priority needs identified by the MCH Coordinator and the Director of Nursing.

1. The following represents a list of the top 7 priority needs chosen for the 2005 reporting cycle:

-To increase the percent of women with a live birth who have received adequate prenatal care as determined by the Kotelchuk Index.

This measure remains unchanged from the previous Need Assessment cycle. It has been determined by Title V staff that there is still significant progress to be

made in this measure and Title V is able to have an overall positive impact on this measure for the Territory.

-To increase the percent of children among the children with special needs who are known to the CSN Program who receive an annual dental assessment.

This is a newly identified priority need by Title V. Title V leadership staff seeks to impact the lives of children with special health care needs and their families in a meaningful way. Towards this end, program constantly assess the CSHCN population in order to determine areas in which they appear to be represented. It was, therefore, identified that they are rarely seen by the dental program for an annual checkup. For these reasons, this was chosen as a priority are by Title V in American Samoa.

-To increase the percent of 2, 3, and 4-year-old children who are seen in the MCH Well Child Clinic who access dental health services.

This measure is newly identified by Title V for this reporting cycle. The Title V Program is fully aware of the problem of dental caries present in the population. This priority measure was chosen in order to positively influence this issue for 2, 3 and 4 year olds.

-To increase the percent of 4-month-old infants who attend the Well Baby Clinic at 4 months of age who are exclusively breastfeeding.

This priority measure was modified by Title V leadership staff for the next reporting cycle. In the previous 5 year cycle, this measure focused on infants of 6 months of age who are exclusively breastfed. Although the program still believes this to be a priority area for this population, Title V leadership staff view the first 4 months of life as being easier to reach and result in a positive impact.

Title V leadership will continue to monitor this situation and assess the program's ability to impact this priority need by changing the measure from 6-month old infants to 4-month old infants.

-To increase the percent of children with special needs who have received an annual reevaluation by an interdisciplinary team.

This priority need remains unchanged from the last Needs Assessment cycle. The Title V staff and CSN program staff, more specifically, view this as a priority need which Title V can still continue to impact through the next reporting cycle.

-To decrease the percent of adolescents in Grades 9-12 who report smoking cigarettes within the past 30 days.

This priority need remains unchanged from the last Needs Assessment cycle. The Title V staff view this as a priority need which Title V can still continue to impact through the next reporting cycle.

- To improve nutritional status of children within the first year of life

This is a newly chosen priority need for the 2005 Needs Assessment cycle. Evidence shows that the habits and beliefs formed early in life, during the first 5 years, has such a significant impact on future behaviors and subsequent health status, that Title V chose to target the early childhood population in an attempt to combat childhood obesity.

The Process used to determine the Territory's Priority Needs

Each of the three work groups: Pregnant women and infants, Children and adolescents, and Children with special health care needs, met a number of times throughout the development of the 5-Year Needs Assessment and intermittently thereafter. Each group meets with the intention of discussing the overall health status of the populations with which they work, suggesting possible health status indicators appropriate for each group, providing data for the National Core Health Status Indicators. Each group meets with the intention of determining additional health status indicators, specific to American Samoa, which would expand the level of assessment beyond that of the National Core Indicators. The results of the work groups are presented below and are described as priority health problems. From this list of problems, the Title V staff worked together at identifying the 7 priority health Needs.

Partnership Building and Collaboration

The Departments and agencies, which collaborated on the development of the Needs Assessment, are outlined below:

-Department of Education - provides data for data elements including YRBS data.

-LBJ Tropical Medical Center-

*Dental Services Division - provided data and other information regarding the dental health needs and services of the MCH population.

-Vital Statistics - assisted in providing data for need assessment as well as outcome measures.

-Department of Commerce - provided data and overall statistical information for the general overview of the Territory as well as some demographic data.

-A committee comprised of a number of government department representatives including a representative of the Community College reviewed the Needs Assessment and their input was solicited.

-The Needs Assessment, Annual report and Annual Plan was made available in the Public Health conference room for public review and comment.

Justification of the Territory's analysis of Needs

American Samoa Title V staff continue to work together in order to provide continuous assessment of the health status of the Title V population. The staff is divided into 3 work groups representing the 3 distinct Title V populations. These work groups will convene throughout the next reporting cycle in order to assess Title V's ability to impact these priority areas in a positive manner.

Health Status Indicators

Health Status Indicator	DATA
#01A. The percent of live births weighing less than 2,500 grams	**3.3%**
#01B. The percent of live singleton births weighing less than 2,500 grams	**2.9%**
#02A. The percent of live births weighing less than 1,500 grams	**.2%**
#02B. The percent of live singleton births weighing less than 1,500 grams.	**.17%**
#03A. The death rate per 100,000 due to unintentional injuries among children aged 14 years and younger.	**4 per 100,000**
#03B. The death rate per 100,000 from unintentional injuries due to motor vehicle crashes among children aged 14 years and younger.	**Not available at this time**
#03C. The death rate per 100,000 from unintentional injuries due to motor vehicle crashes among youth aged 15 through 24 years.	**Not available at this time**
#04A. The rate per 100,000 of all non-fatal injuries among children aged 14 years and younger.	**Not available at this time**
#04B. The rate per 100,000 of non-fatal injuries due to motor vehicle crashes among children aged 14 years and younger.	**Not available at this time**
#04C. The rate per 100,000 of non-fatal injuries due to motor vehicle crashes among youth aged 15 through 24 years.	**Not available at this time**
#05A. The rate per 1,000 women aged 15 through 19 years with a reported case of chlamydia.	**Not available at this time**
#05B. The rate per 1,000 women aged 20 through 44 years with a reported case of chlamydia.	**Not available at this time**
#06A & B. Infants and children aged 0 through 24 years enumerated by sub-populations of age group, race, and ethnicity.	**Not available at this time**
#07A & B. Live births to women (of all ages) enumerated by maternal age, race and ethnicity.	**1,713**
#08A & B. Deaths to infants and children aged 0 through 24 years enumerated by age subgroup, race and ethnicity.	**Not available at this time**
#09A & B. Infants and children aged 0 through 19 years in miscellaneous situations or enrolled in various State programs	**Not available at this time**

enumerated by race and ethnicity	
#10. Geographic living area for all resident children aged 0 through 19 years	**Not available at this time**
#11. Percent of the State population at various levels of the federal poverty level	**60%**
#12. Percent of the State population aged 0 through 19 years at various levels of the federal poverty level	**60%**

Outcome Measures - Federal and State

The presence of Title V in American Samoa serves to positively impact on the established Outcome Measures. Specifically, the Performance Measures and Health Status Indicators require that Title V in American Samoa develop strategies and organize activities which will impact Outcome measures in a meaningful way. The natural flow and the inherent interrelationship between State MCH program activities and the National and State performance measures results in the planning of more strategic activities which focus on meeting Outcome measures. While all Title V programs concentrate efforts towards improved health among the maternal and child population, some performance measures are more strongly linked to improvements in outcome measures.

Despite best efforts, however, in 2002, all 5 Outcome Measure targets were not met. Title V leadership will explore all factors related to this situation in order to find possible solutions to reverse this trend.

Infant Mortality Rate-
The target set for 2004 was 12 per 1,000 live births. This measure was not met in 2004 as indicated by an attainment of 14.8 infant deaths per 1,000 live births.

Ratio of the black infant mortality rate to the white infant mortality rate-
This Outcome measure does not apply to American Samoa as there is no black population present at this point in time. Title V in American Samoa is aware of this disparity at the national level and will continue to monitor the situation as needed.

Neonatal Mortality Rate-
The target set for 2004 was 7 per 1,000 live births. This measure was not met in 2004 as indicated by a rate of 12.9 per 1,000 live births.

Post neonatal Mortality Rate-
The target set for 2004 was 5 per 1,000 live births. This measure was not met in 2004 as indicated by a rate of 5.5 per 1,000 live births.

Perinatal Mortality Rate-

The target set for 2004 was 16 per 1,000 live births. This measure was not met in 2004 as indicated by a rate of 17.6 per 1,000 live births.

Child Death Rate-
The target set for 2004 was 55 per 100,000 live births. This measure was met and exceeded in 2004 as indicated by a rate of 48.9 per 1,000 live births.

While Title V Leadership is greatly encouraged by progress made in many of the performance measures, mortality rates for infants, especially in the neonatal period, continue to be high. Program success in reaching the targeted child death rate per 100,000 indicates successful interventions in this area. Title V will continue to monitor this situation very closely and will continue to review infant deaths in order to determine common contributing factors.

The target rate of birth for teenagers was attained in 2004. This is believed to have had an overall positive impact on the infant (neonatal and post neonatal) as well as fetal mortality rates. The recently established women's clinic provides confidential family planning counseling for the teen population. Teenagers are able to use this clinic during conveniently established hours in order to seek guidance and counseling regarding sexuality, sexually transmitted diseases, and family planning. Radio spots are aired which target the teen population and encourage teens to access services at this after hours clinic.

The rate of deaths to children due to motor vehicle crashed was also successfully reduced in 2004. This is also a contributing factor to the reduction in mortality rates to infants and children in the Territory. Title V continues to focus efforts towards reducing this rate through targeted and continuous health education efforts.

In American Samoa, the percent of children without health insurance continues to be zero. American Samoa has universal health coverage for its population, which includes children. The lack of this barrier to accessing health care further contributes to the accomplishment of targets for Outcome Measures. Additionally, one hundred percent of potentially Medicaid eligible children received a service paid by the Medicaid program in 2004.

Title V plays a role in the very low occurrence of very low birth weight. This also contributes to the accomplishment of outcome objectives. Health education efforts concerning the benefits of early and consistent prenatal care, proper nutrition during pregnancy, appropriate weight gain, etc. impact the low incidence of very low birth weight. Further, Title V has contributed to this accomplishment through the provision of prenatal care by nurse practitioners.

Decreases in the teen suicide rate have also positively impacted the outcome measures. This measure was fully met in 2004.

Title V has also had a positive overall impact on Outcome Measures through the continuation of health education efforts in many areas including nutrition education and counseling prenatal education and breastfeeding education both prenatal and postpartum clinics .